CLAIM AMENDMENTS:

1. (original) Purification method by nanofiltration of an aqueous solution containing one or several sugars, multivalent cations, monovalent metal cations, monovalent anions and multivalent inorganic anions and/or organic acid anions, characterized in that it comprises the operations:

(a) of replacement of at least a part of said multivalent cations and/or of said multivalent inorganic anions and organic acid anions respectively by monovalent metal cations and/or monovalent anions, in order to obtain an aqueous solution depleted in multivalent cations and/or multivalent inorganic anions and organic acid anions, and containing said monovalent metal cations and monovalent anions,

(b) of nanofiltration of the solution resulting from operation (a) in order to obtain as a retentate, a sugar aqueous juice enriched in sugars, in multivalent cations and in multivalent inorganic anions and/or in organic acid anions, and as a permeate, an aqueous effluent enriched in monovalent anions and monovalent metal cations,

(c) of additional demineralization of at least a part of the retentate obtained by operation (b), with a cation-exchange resin of which the counter-ion is H^+ and an anion-exchange resin of which the counter-ion is OH^-, these resins thus charging themselves respectively in residual cations and anions of the retentate, and

(d) of regeneration, on one hand, of said cation-exchange resin by means of a inorganic acid of which the anion is of the same type as the

monovalent anions present in the initial aqueous solution, and on the other hand, of said anion-exchange resin by means of a inorganic base of which the cation is of the same type as the monovalent metal cations present in the initial aqueous solution, which produces regenerated exchange resins and two regeneration effluents mainly containing monovalent anions and monovalent metal cations.

2. (original) Method according to claim 1, characterized in that in operation (a), the replacement of the multivalent cations is performed simultaneously to the replacement of the multivalent inorganic anions and/or organic acid anions, or performed on the aqueous solution having undergone beforehand the replacement of the multivalent inorganic anions and/or organic acid anions.

3. (original) Method according to claim 1, characterized in that in operation (a), the replacement of the multivalent inorganic anions and/or organic acid anions is performed simultaneously to the replacement of the multivalent cations or performed on the aqueous solution having undergone beforehand the replacement of the multivalent cations.

4. (currently amended) Method according to claim ~~1, 2 or~~ 3, characterized in that replacement operation (a) comprises the processing of the aqueous solution with a cationic resin of which the counter-ion is a monovalent metal cation and/or with an anionic resin of which the counter-ion is a monovalent anion.

5. (original) Method according to claim 4, characterized in that the monovalent metal cation forming the counter-ion of the cationic resin and the monovalent anion forming the counter-ion of the anionic resin are of the same type as, respectively,

said monovalent metal cations and said monovalent anions present in the initial aqueous solution.

6. (currently amended) Method according to claim ~~4 or~~ 5, characterized in that it further comprises an operation:

(e) of regeneration of the cationic resin and/or of the anionic resin.

7. (original) Method according to claim 6, characterized in that regeneration operation (e) comprises the processing of the cationic resin and/or of the anionic resin with a permeate obtained during nanofiltration operation (b), after concentration of it to the desired degree.

8. (currently amended) Method according to ~~any one of claims 1 to~~ claim 7, characterized in that it further comprises an operation:

(f) of chromatography of a part of the retentate resulting from operation (b), in order to obtain an effluent enriched in sugar and a raffinate enriched in monovalent anions and monovalent metal cations.

9. (currently amended) Method according to ~~any one of claims 1 to~~ claim 8, characterized in that it further comprises an operation:

(g) of processing of the permeate resulting from operation (b), by reverse osmosis or electrodialysis in order to produce water and an aqueous fraction enriched in monovalent anions and monovalent metal cations.

10. (currently amended) Method according to ~~any one of claims 6 to~~ claim 9, characterized in that it comprises an operation:

of regeneration of the cationic resin and/or of the anionic resin by processing the same with at least one of the following liquids, possibly

concentrated, combined to at least a part of the permeate obtained during operation (b): effluents obtained during operation (d), raffinate obtained during operation (f), aqueous fraction obtained during operation (g).

11. (currently amended) Use of the method according to ~~any one of the preceding claims~~ claim 1, for the purification of a whey, of a permeate resulting from the ultrafiltration of a whey or of a sugar beetroot juice, of a sugarcane juice, of a chicory juice or of a Jerusalem Artichokes, this whey, permeate or juice comprising Ca^{2+} and Mg^{2+} ions, Cl^- anions, Na^+ and K^+ cations and anions selected mainly in the group consisting in the phosphate and sulfate anions, anions from organic acids and their mixtures.

12. (new) Method according to claim 2, characterized in that replacement operation (a) comprises the processing of the aqueous solution with a cationic resin of which the counter-ion is a monovalent metal cation and/or with an anionic resin of which the counter-ion is a monovalent anion.

13. (new) Method according to claim 12, characterized in that the monovalent metal cation forming the counter-ion of the cationic resin and the monovalent anion forming the counter-ion of the anionic resin are of the same type as, respectively, said monovalent metal cations and said monovalent anions present in the initial aqueous solution.

14. (new) Method according to claim 13, characterized in that it further comprises an operation:

(e) of regeneration of the cationic resin and/or of the anionic resin.

15. (new) Method according to claim 14, characterized in that regeneration operation (e) comprises the processing of the cationic resin and/or of the anionic resin with a permeate obtained during nanofiltration operation (b), after concentration of it to the desired degree.

16. (new) Method according to claim 15, characterized in that it further comprises an operation:

(f) of chromatography of a part of the retentate resulting from operation (b), in order to obtain an effluent enriched in sugar and a raffinate enriched in monovalent anions and monovalent metal cations.

17. (new) Method according to claim 16, characterized in that it further comprises an operation:

(g) of processing of the permeate resulting from operation (b), by reverse osmosis or electrodialysis in order to produce water and an aqueous fraction enriched in monovalent anions and monovalent metal cations.

18. (new) Method according to claim 17, characterized in that it comprises an operation:

of regeneration of the cationic resin and/or of the anionic resin by processing the same with at least one of the following liquids, possibly concentrated, combined to at least a part of the permeate obtained during operation (b): effluents obtained during operation (d), raffinate obtained during operation (f), aqueous fraction obtained during operation (g).

19. (new) Method according to claim 1, characterized in that replacement operation (a) comprises the processing of the aqueous solution with a cationic resin of which the counter-ion is a monovalent metal cation and/or with an anionic resin of which the counter-ion is a monovalent anion.

20. (new) Method according to claim 1, characterized in that it further comprises an operation:

(f) of chromatography of a part of the retentate resulting from operation (b), in order to obtain an effluent enriched in sugar and a raffinate enriched in monovalent anions and monovalent metal cations.